RECORD OF DECISION

As the Deputy Assistant Chief of Staff for Installation Management, I have reviewed the *Final Fort Carson Transformation Environmental Impact Statement* (EIS), which is incorporated by reference. The EIS adequately assesses the environmental impacts of implementing Army transformation programs at Fort Carson and related alternatives. As indicated in this Record of Decision (ROD), the Army will proceed with its selected action of implementing the Preferred Alternative.

1.0 Background

The U.S. Army (Army) is currently undergoing transformational activities across a full spectrum of military operations to respond more rapidly to enemy threats. These changes would affect most, if not all, aspects of the Army's doctrine, training, leader development, organizations, installations, materiel acquisition and fielding, and Soldiers. As part of this process, the Army is realigning and transforming the Fort Carson military installation. Changes are expected to occur between 2007 and 2011.

The Army prepared the EIS in compliance with its responsibilities under the National Environmental Policy Act (NEPA) to assess the direct, indirect, and cumulative environmental and socioeconomic effects of implementing three specific Army transformational programs at Fort Carson: 1) the Base Realignment and Closure (BRAC) Program (BRAC 2005), authorized under the Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended; 2) the Global Defense Posture Realignment (GDPR), formerly known as Integrated Global Presence and Basing Strategy (IGPBS); and 3) the Army Modular Force (AMF) initiative. Implementing these programs will involve constructing new facilities to support additional Soldiers and their dependents; modifying range and training areas, including new construction; and using live-fire training ranges and maneuver areas at Fort Carson more frequently.

2.0 Preferred Alternative

The Preferred Alternative evaluated in the EIS includes three primary components: 1) changes in force structure resulting in a net gain of military units and personnel, 2) facility demolition and construction, and 3) increased frequency of live-fire and maneuver training. The Preferred Alternative is the Army's selected action. Under the Preferred Alternative, the number of troops at Fort Carson will increase by approximately 8,500 Soldiers. Military dependent, civilian, and contractor worker populations supported by Fort Carson will also increase. In total, Soldiers, their dependents, and support personnel will grow to about 59,700 by 2011, an increase of approximately 21,300 persons (60 percent) during the implementation period.

The Preferred Alternative includes demolishing facilities and infrastructure no longer needed; relocating facilities to support new construction; and renovating existing facilities and infrastructure to support the new population and training activities. In addition, the Army will construct a number of new facilities and infrastructure and increase the use of Fort Carson's training lands to accommodate the additional troops. Twenty-five construction projects are proposed at Fort Carson, primarily in the cantonment area.

The Preferred Alternative will provide for increased training activity for existing and new units stationed at Fort Carson. The increased training requirements of additional Active and Reserve Components will result in greater frequency of use of the training areas. The installation's range area will be heavily used for individual and crew live-fire, maneuver, and combined live-fire and

maneuver training. Fort Carson will continue to follow its existing land and environmental management programs to balance training requirements and land sustainability. Large-area maneuver training for Fort Carson's troops will continue to occur at the Pinon Canyon Maneuver Site (PCMS), Fort Carson's maneuver training area located approximately 150 miles southeast of Fort Carson. This training is the subject of the separate *Final PCMS Transformation EIS*. The Army determined that the difference in the proposed actions for the two sites, the difference in the affected environment, and convenience to the public made the preparation of two separate EISs a logical choice.

3.0 Purpose of and Need for the Selected Action

The purpose of the selected action is to implement three major Army programs affecting Fort Carson: 1) BRAC, 2) GDPR, formerly known as IGPBS; and 3) the AMF.

The need for the selected action is to advance the goals of transformation, improve military capabilities, and enhance military value. Transformation goals were a central component of the BRAC 2005 process. The BRAC Commission noted that this round of BRAC focused not just on reducing costs and closing unneeded military installations but also on "facilitating the transformation of our armed forces to meet the challenges of the new century" (Defense BRAC Commission, 2005). The Preferred alternative evaluated in the EIS is the Army's selected action to achieve the objectives for which Congress established the BRAC process.

4.0 Alternatives to the Selected Action

The EIS evaluated two alternatives in detail: the Preferred Alternative and the No Action Alternative. The implementation of the Preferred Alternative, which is described in Section 2.0, above, is the Army's selected action.

The No Action Alternative was included in the EIS in accordance with the Council on Environmental Quality (CEQ) and Army NEPA-implementing regulations. Under the No Action Alternative, the changes required by BRAC 2005, IGPBS, and AMF would not be implemented at Fort Carson, and the force structure, assigned personnel, and equipment would remain as they existed prior to the development of these programs. The No Action Alternative is not feasible, however, because realignment has been directed by BRAC 2005. The No Action Alternative was included in the EIS to provide a benchmark against which to compare the magnitude of environmental effects of the selected action.

The Army considered several alternatives to balance training requirements and land availability. These alternatives included training troops at other locales, acquiring additional land, or varying training schedules to account for operational deployments. These alternatives were determined not to be reasonable because they either were not feasible or unreasonably restricted the Army's ability to react to changing conditions. Therefore, only the Preferred Alternative and the No Action Alternative were carried forward for detailed environmental analyses in the EIS.

Alternatives to restationing troops to Fort Carson were not considered in the EIS. Under the Base Closure and Realignment Act of 1990, decisions regarding restationing troops to alternate installations are not revisited in NEPA documents. The Army also prepared a *Programmatic EIS for Army Transformation* to address environmental impacts of transformational activities on a national level. The EIS tiers from that analysis and provides site-specific analysis of impacts at Fort Carson.

5.0 Environmental Consequences

The EIS identified the direct, indirect, and cumulative impacts of implementing the selected action in the following resource areas: land use; air quality; noise; geology and soils; water resources; biological resources; cultural resources; socioeconomics, including environmental justice; transportation; utilities; and hazardous and toxic substances. These impacts are described below. With implementation of mitigation and best management practices (BMPs) (as described in Section 6.0), there would be no significant environmental impacts associated with the selected action.

Land Use, Plans, and Policies. Minor adverse impacts will occur to land use, both on and off of Fort Carson. On Fort Carson, encroachment of cantonment-type facilities along Wilderness Road could reduce availability of range lands for training activities. Increased training could degrade training lands and affect the long-term availability of training lands for military use. Some residential land uses surrounding the installation are incompatible with noise generated by military training activities. This incompatibility will persist.

Air Quality. Minor long-term and short-term adverse impacts to air quality will occur. Short-term increases in air emissions from construction and demolition will also occur. Long-term increases in emissions from operational emissions from additional external combustion sources (such as boilers and hot water heaters) and increases in mobile emissions will result. Vehicular emissions will increase, both on and off post, from additional personnel traveling throughout the installation and in the surrounding region, and from minor increases in exhaust emissions attributable to construction and increased traffic congestion. Fugitive dust emissions attributable to increased off-road vehicle travel also will increase. Air quality modeling results, however, indicate that air emissions for all sources will be below the thresholds of National Ambient Air Quality Standards (NAAQS), will conform to the State Implementation Plan for the Colorado Springs Carbon Monoxide Maintenance Area, and/or will be less than the Prevention of Significant Deterioration (PSD) major modification applicability thresholds for all criteria pollutants.

Noise. There will be temporary increases in noise levels adjacent to construction sites that could affect sensitive receptors on Fort Carson during construction. Noise from construction, however, is not expected to extend outside the boundaries of Fort Carson. No new permanent noise impacts are expected for residences on or off Fort Carson. Residential areas surrounding Fort Carson, including El Rancho, Midway Ranch, and Turkey Canyon Ranch, will continue to be located within high-noise contours. Although the frequency of training will increase, noise contours (areas of high noise) will be the same as under the No Action Alternative (that is, there will be no change in noise impacts under the selected action) because no new weapons will be used under the selected action.

Geology/Soils. Increased training activities, such as tank defilades, tank traps, neutral pivot turns, repeated vehicle passes, and bivouacking may cause direct impacts to soils such as compaction and ruts. Training on wet soil could increase rutting and permanently destroy vegetative cover (root systems). In addition, increased wind and water erosion could occur in areas where vegetative cover is affected. Ground disturbance associated with construction and demolition projects could result in erosion and sedimentation.

Water Resources. Increased erosion from increased training activities, including mechanized maneuvers, crossing dry drainages, and training in wet conditions, could result in increased sedimentation of surface waters. Increases in impervious surfaces (from buildings and paved areas) will increase stormwater runoff and the potential for pollutants to affect surface water quality and floodplains. Increased use of groundwater to support increased training activities could reduce water supply or stress aquifers. Increased use of fuels and solvents during training has the potential to result

in accidental spills that could adversely affect water quality. Ground disturbance from construction and demolition activities could result in erosion and sediment transport to surface water. Spills of fuels, solvents, or other hazardous materials used during construction could adversely affect water resources.

Biological Resources. Both long- and short-term adverse effects to vegetation will occur. Increased training activities may result in greater vegetation damage, including loss of cover, injury to shallow roots, and altered plant species composition. Live-fire training activities could result in greater damage to vegetation from shells and other ammunition, and more firing of live-fire tracer rounds could result in more accidental wildfires and burn vegetation. Construction in the Cantonment and training areas will result in temporary ground disturbance and permanent loss of small areas of native vegetation. Most of the construction areas are either disturbed or small in footprint and, therefore, impacts to native vegetation will be minimal.

As a result of increases in training, greater impacts to wildlife, such as disturbance of habitat or movement to avoid impact of munitions, noise, or Soldiers and vehicles, could occur.

Fort Carson is home to several State-listed sensitive wildlife species. The black-tailed prairie dog (Cynomys ludovicianus), burrowing owl (Athene cunicularia), and mountain plover (Charadrius montanus) could be adversely affected if training activities occur near these species and buffers are not maintained around prairie dog towns or nests. Training restrictions and buffers around active golden eagle (Aquila chrysaetos) nests could minimize impacts to golden eagles during the nesting season. Other sensitive species will not be affected.

Cultural Resources. Increased training increases the possibility of adverse effects and inadvertent impact to historical and archaeological sites. Construction under the selected action could also result in inadvertent impact to previously unidentified archaeological sites.

Socioeconomics. Minor temporary economic benefits associated with construction expenditures and employment will occur in the region of influence (ROI) (El Paso, Fremont, Pueblo, and Teller counties). In addition, minor long-term economic benefits (increased sales volume, employment, and income in the ROI) will occur as a result of the population expansion at Fort Carson. The increased population will result in minor increases in the demand for schools, housing, and public services/amenities in the ROI, but sufficient capacity exists within these services to accommodate the growth.

Transportation. The increase in troop and dependent populations will result in increased demand at access control points and increases in traffic congestion on installation roadways. Traffic volumes on regional roadway networks will also increase as a result of the additional troops and dependents relocated to Fort Carson. Traffic congestion on regional roadways, however, is projected to increase regardless of the effect from implementing the selected action. Transit ridership on buses serving Fort Carson will increase but Mountain Metropolitan Transit has sufficient capacity to accommodate these increases. Construction will result in temporary traffic increases.

Utilities. Fort Carson's utility infrastructure does not have sufficient capacity to support the increased demand that will occur. Utilities to be upgraded or extended include potable water, sanitary sewer, stormwater conveyance, natural gas, and communication lines.

Hazardous and Toxic Substances. Increases in the number of on-post personnel will result in the increased use of hazardous materials, the occurrence of special hazards (from additional training activities and the use of hazardous and medically-related radiological materials), and generation of hazardous and non-hazardous wastes from construction and operation of new facilities. Construction

of new facilities, depending upon the siting of those facilities, could result in disturbance of existing contaminated sites.

Cumulative Effects. In accordance with CEQ regulations implementing NEPA, the EIS evaluated the cumulative effects of relevant past, present, and reasonably foreseeable actions, both at Fort Carson and in the surrounding community. This effort included coordination with surrounding municipalities and counties, state agencies, and Department of Defense installations. Transformation actions at the PCMS, which are evaluated in the Final PCMS Transformation EIS, were not considered cumulative to the Fort Carson actions because of the distance between the installations and the differing functions and impacts at the two sites. Cumulative effects were assessed by resource areas (air quality, cultural resources, water resources, biological resources, and transportation) and summarized in Table 3-24 of the EIS. Cumulative effects identified included increased air emissions (within NAAQS), increased potential for destruction of cultural resources, increased impervious surfaces and sedimentation and more disturbance to floodplains, more loss of native plant communities and disturbance and displacement of species, and increased congestion of the urban and rural transportation network during peak travel.

The mitigation measures described in Section 6.0 of the EIS will minimize or avoid incremental impacts and no cumulatively significant impacts will occur.

6.0 Mitigation

The selected action includes compliance with BMPs, existing management plans and programs; and federal laws that support the sustainability of Fort Carson's military mission and mitigate the majority of the adverse impacts. The Army will continue to implement existing management plans, as periodically revised and updated, including the *Integrated Natural Resource Management Plan* (DECAM, 2002a); *Integrated Cultural Resources Management Plan* (DECAM, 2002b); *Installation Pest Management Plan* (DECAM, 2004h); *Fugitive Dust Control Plan* (DECAM, 2004a); and the *Prescribed Fire Plan* (DECAM, 2003).

Implementation of training activities is dependent on a number of factors, such as troop deployment and climate, and is defined as a process-driven approach that responds to those needs. Mitigation for training activities, therefore, will be included as appropriate to the activities that occur in a given training-year calendar. The ROD commits that the Army will follow the coordination of training development outlined in Section 2.2.4.2 of the EIS. The types of mitigations that will be considered are presented herein. The construction component of the selected action is well-defined, and impacts and mitigation, therefore, are also well-defined and presented herein.

The following resource-area mitigation measures will be included in the implementation of the selected action. All practicable means to avoid or minimize environmental harm resulting from the selected action have been adopted. Before beginning facilities construction or training, the Garrison Commander will develop and implement procedures, consistent with Appendix C of Title 32 of the Code of Federal Regulations (CFR), Part 651 (32 CFR 651) (*Mitigation and Monitoring*), for mitigation measures outlined below.

Land Use, Plans, and Policies. The Army will continue to coordinate among the Directorate of Public Works Master Planning Division, G-3, and Directorate of Plans, Training and Mobilization - Range Division staff in siting of new facilities. The Army will continue to follow Army Regulation (AR) 200-1 and the Installation Environmental Noise Management Plan to monitor noise and discourage incompatible new development around Fort Carson. In addition, the Army will continue to

implement land management and environmental programs to balance training requirements and the need to maintain quality training lands for sustained military use.

Air Quality. Measures will be implemented to mitigate long-term effects from training and increased personal vehicle travel, and the short-term effects from construction. The Army will continue working with Mountain Metropolitan Transit and the Pikes Peak Area Council of Governments (PPACG) to encourage transit ridership and carpooling to reduce vehicle travel miles. The Army also will complete needed on-post roadway improvement projects to reduce congestion. For training exercises, the Army will continue to follow Fort Carson's Fugitive Dust Control Plan, Air Quality Control Commission (AQCC) Regulation No. 1 (opacity), Construction Permit No. 96EP340-14 (fog oil smoke), and other federal, state, and local regulations and permits governing air quality. The Army also will implement dust suppression and establish speed limits during training exercises. In managing prescribed burning, the Army will continue to adhere to the requirements of AQCC Regulation No. 9, "Open Burning, Prescribed Fire and Permitting," to ensure that conditions are acceptable for prescribed fires and that air quality is not compromised. For construction projects, the Army will obtain required land disturbance permits and follow permit conditions and other regulations. The Army also will track changes in the potential to emit air emissions outlined in the EIS and will update PSD analyses as necessary with the Colorado Department of Public Health and Environment.

Noise. The Army will continue to follow AR 200-1 and the Installation Environmental Noise Management Plan. Procedures and policies in the plan for avoiding or reducing noise impacts to surrounding communities include identification of areas most likely to experience noise impacts and establishment of no-fly zones. The Army also will continue to implement (in cooperation with El Paso County) the Army Compatible Use Buffer program to maintain a 1.5- to 2-mile (2.4- to 3.2-kilometer) buffer around Fort Carson. This will address impacts to sensitive receptors in development and encroachment areas adjacent to Fort Carson. Construction practices, such as nighttime construction and use of backup alarms, will be modified as appropriate to reduce effects of possible construction noise impacts to Fort Carson residences and parks.

Geology and Soils. The Army will continue to follow existing plans and implement standard BMPs to minimize the potential for soil erosion during construction and demolition activities. BMPs include grading of roads to ensure proper drainage, installation and maintenance of erosion control features (such as check dams, water bars, and hardened crossings), maintenance of erosion control dams, and installation and maintenance of diversion dams. Plans and programs developed and implemented to reduce the effects of erosion and sediment include Fort Carson (FC) Regulations 350-12, 385-63, and 350-19; AR 350-9; and the Integrated Natural Resource Management Plan, Fugitive Dust Control Plan, and Section 404 Regional Permit No. 2002-00707. The Army will continue to implement land management and environmental programs, such as the Integrated Training and Management (ITAM) program, to balance training requirements and the need to maintain quality training lands for sustained military use and stabilize areas against erosion. Additional erosion control and maneuver damage repair or reclamation projects will be implemented for areas damaged by increased training activities. The Army will continue to educate troops and implement training guidelines to minimize impacts of training activities on soils.

Water Resources. The Army will implement erosion control measures as described above for geology and soils to reduce the turbidity or sedimentation impacts to water resources from increased erosion. Fort Carson will continue to implement the Spill Prevention Control and Countermeasures Plan and Lead Management Plan to address leaks or spills of fuels, solvents, and other hazardous and toxic substances used during training exercises. Vehicle and equipment fueling and maintenance will be

restricted to approved areas unless emergent field maintenance is required. If field maintenance is required, appropriate control and containment measures will be implemented to prevent accidental contamination of surface water.

To protect water quality during construction of new facilities, the Army will continue to implement existing BMPs, follow permitting requirements, and adhere to FC Regulation 200-1. For all construction projects, contractors performing work at Fort Carson will submit a notice of intent to obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges from Construction Activities for each construction project that disturbs 1 acre or more of land. In addition, contractors will develop and implement a Stormwater Pollution Prevention Plan and Post Construction Stormwater Management Plan. These plans will specify mitigation strategies to reduce impacts from stormwater runoff during and after construction. Construction projects in the Cantonment will be sited to avoid discharge of dredged or fill material into "B"-Ditch, "T"-Ditch, "U"-Ditch, or any other jurisdictional waterways. If avoidance is not possible, a Department of the Army permit under Section 404 of the Clean Water Act will be obtained and any required mitigations from the Section 404 permit will be implemented. All potential impacts requiring 404 permitting will be coordinated with the U.S. Army Corps of Engineers, Albuquerque District and mitigations will be implemented, as necessary.

Biological Resources. The Army will continue to use its land and environmental management programs at Fort Carson to provide for sustainable land management to minimize impacts to training. The Army will continue to follow environmental plans and regulations, and use ITAM programs to repair vegetation damage. The Army will continue to use prescribed burning to create buffer areas for wildlife and provide additional protection from wildfires near live-fire training activities. Buffer zones around sensitive wildlife locations, such as bird nests, will be accommodated where feasible. Existing species management plans will continue to be implemented. The Army will continue to coordinate training activities among Fort Carson's directorates and continue to follow environmental plans and regulations, and use ITAM to repair vegetation damage.

Areas disturbed during construction will be reclaimed and revegetated with native or other suitable vegetation, as appropriate. Wildlife displacement during construction will be temporary and, therefore, no mitigation is necessary.

Cultural Resources. Activities with the potential to result in adverse effects to cultural resources will be evaluated and resolved under the Section 106 effect determination and mitigation processes. The Army will apply and enforce Fort Carson's "Inadvertent Discovery of Archaeological Resources or Burials" Standard Operating Procedure (SOP) and the "Native American Graves Protection and Repatriation Act of 1990" SOP. The Army is updating the 2006-2010 Installation Cultural Resources Management Plan and developing a Programmatic Agreement with the Colorado State Historic Preservation Officer, the Advisory Council on Historic Preservation, and four Native American Tribes with a cultural affiliation to Fort Carson-administered lands. The Army will follow the procedures in the plan and the agreement.

Socioeconomics. No mitigation is required because adverse impacts to socioeconomics or environmental justice would not occur.

Transportation. The EIS recommended implementing the suggested transportation improvements outlined in the Fort Carson Transportation Study and opening Gates 6 and 19 to Installation personnel as possible mitigation to adverse traffic conditions on Fort Carson attributable to the Preferred Alternative. The Army is not currently resourced to execute these projects, and therefore they are not practicable and are not being adopted. As the proposed action proceeds, these projects may be submitted for Army funding. The Army will continue to coordinate with local agencies to plan and program future transportation improvements to accommodate Fort Carson traffic growth outside its boundaries. Programmed improvements contained in the PPACG Transportation Improvement Plan would accommodate traffic growth associated with Fort Carson and other regional growth. The Installation Transportation Officer will schedule rail shipments in advance of training activities to minimize the effects of increased use of the rail system. The Army will continue to coordinate with Mountain Metropolitan Transit to assess Fort Carson's transit needs. The Army will implement standard traffic-control procedures during construction and limit construction vehicle movements during rush hours and within administrative, housing, and school areas to minimize temporary traffic delays and disturbance during construction.

Utilities. The Army will implement planned upgrades of water lines and construction of new potable service and supply lines and water pumps. The Army will install additional sanitary sewer lines to connect training ranges to the Fort Carson Wastewater Treatment Plant. The Army will upgrade stormwater system and implement post-construction BMPs for newly constructed facilities.

The Army will upgrade its natural gas system and coordinate with Colorado Springs Utilities to provide additional capacity. The Army will install an additional electric substation, perform transformer upgrades, and coordinate with Colorado Springs Utilities to provide additional electrical capacity. Fort Carson will continue renewable energy commitments and energy-efficient projects. The Army will continue to manage generated solid wastes in accordance with the existing *Integrated Solid Waste Management Plan*.

Hazardous and Toxic Substances. The Army will continue to implement existing management plans to minimize impacts from increased use of hazardous materials and management of hazardous wastes from increased personnel. The Army will continue to implement management plans and SOPs for munitions handling, unexploded ordnance removal, lead management, and reduction of fire hazards to minimize impacts from increased training. The Army will continue to implement hazardous waste and radon management plans to minimize impacts from increased waste use and generation during construction, and to minimize radon exposure in new facilities. The Army will manage radiological materials (and waste) in accordance with existing plans to minimize impacts from construction of new medical/dental facilities. The Army will coordinate with Fort Carson's environmental staff on plans and documents to address design, avoidance, and project siting to avoid or minimize impacts to existing contaminated sites.

7.0 Decision

I have considered the results of the analysis presented in the EIS, supporting studies, and comments provided during formal comment and review periods. These factors as well as the description of the purpose and need for the selected action guided my decision on whether to approve the selected action.

On behalf of the Army, I have decided to implement the selected action. I have determined that implementing the selected action meets the purpose and need for achieving the Army's mission requirements consistent with the BRAC law and other transformation programs, and reflects a proper balance among initiatives for protection of the environment, appropriate mitigation, and mission accomplishment. I also took into account the fact that the No Action alternative would not meet the Army's purpose and need for the action. Other alternatives were considered and dismissed from detailed analysis because they did not meet the Army's purpose and need for the action. Furthermore, I have determined that the Army has identified and adopted all practicable means to avoid or minimize harm to the environment that could be caused by implementation of the selected action.

CRAIG E. COLLEGE

Deputy Assistant Chief of Staff for Installation Management

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